SUPERIOR COURT OF THE STATE OF CALIFORNIA

FOR THE COUNTY OF SANTA CLARA

ANTELOPE VALLEY GROUNDWATER CASES,	) Santa Clara) Case No.) 1-05-CV-049053) VOLUME II

TRIAL TESTIMONY OF JOSEPH SCALMANINI

TUESDAY, JANUARY 11, 2011

REPORTED BY:

JANIS JENNINGS, CSR 3942, CLR, CRP

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neighborhood of 200,000. And that climbed another 50 percent, or to about 300,000, by the mid 2000s.

The two are -- excuse me.

The total is predominated by the combination of Lancaster and Palmdale which are reflected by red and blue squares and plot -- in the plot below the total. And there are a number of smaller individual components that are tracked at the bottom, but they're all relatively small components of the total as contrasted to Palmdale and Lancaster dominating the population makeup of the Antelope Valley. 14:43:48 14:44:09

BY MR. DUNN:

Q. When you say "Lancaster and Palmdale," are you referring to the cities of Lancaster and Palmdale respectively? 14:44:20

A. Yes.

Q. Directing your attention please to the exhibit premarked as Exhibit 52, labeled "Applied Crop Water Duties Reference Evapotranspiration and Crop Coefficients Antelope Valley Area of Adjudication." 14:44:37

(Whereupon, Scalmanini Exhibit 52 was introduced for identification.)

BY MR. DUNN: 14:44:50

Do you have Exhibit 52 before you?

A. Yes.

Q. Who prepared Exhibit 52?

A. Our office did.

Q. Where did the information come from? 14:44:54

A. There are two things reflected on Exhibit 52. One is referenced "evapotranspiration," that is abbreviated ETo, and crop coefficients for various crops grown in Antelope Valley that's denoted as Kc. 14:45:30

The referenced evapotranspiration data was taken from the so-called CIMIS, C-I-M-I-S; which stands for California Irrigation Management Information System, located at Victorville, which is immediately east of the Antelope Valley. And 14:45:54 because at the time there was no CIMIS reference of evapotranspiration data available for the Antelope Valley, and the reference evapotranspiration data reflects an average for --

MR. ZIMMER: Objection as previously 14:46:15 stated. It's also nonresponsive.

MR. DUNN: I'm sorry, Mr. Zimmer. I will have to ask you to either put the objection on the record before he starts his question or if not before, to allow him to finish his answer. 14:46:29

MR. ZIMMER: Well, the problem is that the answers go on so long they're extremely nonresponsive oftentimes and overbroad that it's hard to know exactly where he's going. So if something comes up that appears to be objectionable for the reasons we stated earlier, then I need to bring that to the Court's attention.

MR. DUNN: But again, I would ask you not to interrupt the witness as he begins to answer the question. And noted for the record is your characterization of the witness' testimony. Thank you.

BY MR. DUNN:

Q. Mr. Scalmanini --

A. So where was I before he interrupted?

Q. Let me see if I can assist.

A. Jesus. Unbelievable.

Q. One moment, please.

MR. ZIMMER: Perhaps we could have a question.

THE WITNESS: We had one. I was in the middle of answering it.

MR. JOYCE: Why don't we have the court reporter read it back.

BY MR. DUNN:

Q. Mr. Scalmanini, the question that was last asked was with regards to Exhibit No. 52, "Where did the information come from?" my notes show that you were explaining the evapotranspiration coefficient information and the CIMIS station located in Victorville. There was no CIMIS data available at that time in the Antelope Valley, and then the interruption or objection by Mr. Zimmer at that point so -- 14:48:09

MR. ZIMMER: And, Mr. Dunn, that what you just read right there is a perfect example of the problem we're having here. You asked him where the information came from. Mr. Scalmanini on his own, which he's prone to do, simply went off to tell us what he wanted to tell us regardless of any question pending after that information. 14:48:28 14:48:44

Therefore, it's very clear when you read the question back that it was in fact nonresponsive. It also raises the issue of why I had to object in the middle of it because he was being nonresponsive, and the question that you had asked was not the question of what it showed, which I've been previously objecting to for all the reasons we raised with the Court. 14:48:54

If Mr. Scalmanini perhaps could answer 14:49:06

the question rather than telling us what he thinks he wants to tell us, that would be helpful.

MR. DUNN: Mr. Zimmer, your comments are noted for the record.

I will ask the court reporter to read back the last question and then Mr. Scalmanini's answer. And that question, as I have it, is, "Where did the information come from?" 14:49:17

If you will read that question back and Mr. Scalmanini's answer up to the point in time where Mr. Zimmer comes on the record. 14:49:31

MR. ZIMMER: It's nonresponsive.

(Record read as follows:

"Q. Where did the information come from?

"A. There are two things reflected on Exhibit 52. One is referenced 'evapotranspiration,' that is abbreviated ETo, and crop coefficients for various crops grown in Antelope Valley that's denoted as Kc. 14:45:29

"The referenced evapotranspiration data was taken from the so-called CIMIS, C-I-M-I-S; which stands for California Irrigation Management Information System, 14:45:48

located at Victorville, which is immediately east of the Antelope Valley. And because at the time there was no CIMIS reference of evapotranspiration data available for the Antelope Valley, and the reference evapotranspiration data reflects an average for --")

THE WITNESS: -- the period 1994 through 2003 from the Victorville station. The crop coefficients are taken from a table published by the California -- excuse me -- University of California Cooperative Extension Service for the California High Desert in 2004. 14:50:45

BY MR. DUNN:

Q. Exhibit No. 52, what does it show? 14:51:08

MR. ZIMMER: Objection as previously stated.

THE WITNESS: It lists basic reference evapotranspiration data and crop coefficient data in basically -- or for basically bimonthly periods throughout the year with crop coefficients reflecting differences in the fractions of total reference evapotranspiration water use as a function of plant growth stage for the various crops listed in the table. 14:51:28 14:51:58

BY MR. DUNN:

Q. Mr. Scalmanini, directing your attention to the exhibit marked next in order, Exhibit No. 53, it is labeled "Applied Crop Water Duties Evapotranspiration of Crops Antelope Valley Area of Adjudication." 14:52:11

(Whereupon, Scalmanini Exhibit 53 was introduced for identification.)

BY MR. DUNN:

Q. Do you have number -- Exhibit No. 53 before you? 14:52:20

A. Yes.

Q. Who prepared it?

A. Our office did.

Q. Where did the information come from? 14:52:26

A. The numbers reflected in the table are the product of the two pieces of information in Exhibit 52, where here in Exhibit 53 evapotranspiration of water by crops or symbolized by ETc is a product of referenced evapotranspiration in the previous exhibit times the crop coefficient listed in the previous exhibit at the various respective stages of growth of the various crops. 14:52:53

Q. And what does Exhibit No. 53 depict?

MR. ZIMMER: Same objection. 14:53:15

THE WITNESS: It depicts how much water each of the crops listed in Exhibit 53 evapotranspirates through its growth cycle, whether that's continuous or through part of any given year in the Antelope Valley.

BY MR. DUNN:

Q. I would like to direct your attention to the next exhibit marked in order as Exhibit No. 54.

(Whereupon, Scalmanini Exhibit 54 was introduced for identification.)

BY MR. DUNN:

Q. It is labeled "Applied Crop Water Duties Evapotranspiration of Applied Water Antelope Valley Area of Adjudication."

And, Mr. Scalmanini, do you have Exhibit No. 54 before you?

A. Yes.

Q. And I observed that you were also referring to Exhibit No. 101.

A. Yes.

Q. Are you locating another copy of that Exhibit 54?

A. Yes.

Q. Where did you find it in Exhibit No. 101?

A. Each of the last two exhibits plus this one are taken from Appendix D-3 of Exhibit 101.

Q. And who prepared Exhibit No. 54?

A. Our office did.

Q. And, again, where did the information come from? 14:54:36

A. Well, this is, I'll call it, a continuing tabulation of calculations that began with Exhibit 52 and continued through 53 and now gets to Exhibit 54. 14:55:00

And the resultant evapotranspiration of applied water summarized in Exhibit 54 comes from Exhibit -- the numbers in Exhibit 53 less any water that was considered to have been effectively contributed by precipitation. So in simple summary, 14:55:32 the evapotranspiration of applied water are labeled ETaw is a result of the evapotranspiration of the crop in Exhibit 53 minus effective precipitation denoted as Pb in Exhibit 54.

Q. What does Exhibit No. 54 show? 14:56:04

MR. ZIMMER: Same objections.

THE WITNESS: As contrasted to Exhibit 53, which simply shows how much water a crop would evapotranspirate, Exhibit 54 reflects how much applied water; meaning after any contribution by 14:56:22

precipitation, so how much applied water, water being applied by man, would be evapotranspirated by the respective crops.

BY MR. DUNN:

Q. Directing your attention, please, to Exhibit No. 55 premarked for identification. 14:56:39

(Whereupon, Scalmanini Exhibit 55 was introduced for identification.)

BY MR. DUNN:

Q. It is labeled "Applied Crop Water Duties Distribution Uniformity, Applied Water, Irrigation Efficiencies, Antelope Valley Area of Adjudication." 14:56:44

Do you have Exhibit No. 55 before you?

A. Yes.

Q. Who prepared Exhibit 55? 14:57:03

A. Our office did.

Q. Where did the information come from?

A. Well, it's a collection of information that was calculated as summarized in the preceding exhibits to list the evapotranspiration or ETc evapotranspiration by crops, effective precipitation, evapotranspiration of applied water, distribution uniformity, which we estimated for the irrigation methods, you know, applied in the Valley, to ultimately calculate and applied water for each 14:57:17 14:57:42

crop which would be the evapotranspiration of applied water divided by the distribution uniformity, and then added amounts of water which we understood to be used as part of what you might call cultural practices for the different types of crops for control of, for example, erosion by wind to come up with a total applied water which is labeled AWt -- 14:58:05

MR. ZIMMER: Objection. Nonresponsive.

I think the question was where the information came from, not what it is. 14:58:24

BY MR. DUNN:

Q. Mr. Scalmanini, did you finish your answer to the question?

A. Almost. 14:58:35

Q. Would you please continue.

A. Okay. And so all these numbers came from calculations which progressively got to the applied water total, which is listed both in inches and in feet toward the right-hand side of the table -- or excuse me -- the exhibit. 14:58:52

And then ultimately a calculation of overall irrigation efficiency which is defined as the bottom -- at the bottom of the exhibit as a calculated number that's -- that is the sum of 14:59:11

evapotranspiration --

MR. ZIMMER: Objection. Nonresponsive.

BY MR. DUNN:

Q. Would you please continue.

A. So the last column comes from a calculation as summarized in the last footnote that overall irrigation efficiency is the sum of evapotranspiration of applied water which is the one, two, three -- fourth column in this table plus applied water for erosion control, which is the one, two, three, four, five, six -- seventh column, plus applied water for pre-irrigation, which is the one, two, three, four, five, six, seven -- eighth column in this exhibit, all divided by total applied water; you know, a consistent set of units which would be the ninth column in this table to produce the numbers that are listed as overall irrigation efficiency in the last column. 14:59:25 14:59:45 15:00:08

MR. DUNN: It is now 3:00 p.m.

THE VIDEOGRAPHER: This marks the end of tape No. 2 -- 15:00:26

MR. ZIMMER: Hold on a second before we go off the record.

Mr. Dunn, I thought yesterday we had some discussion about checking with the witness to see if 15:00:37

CERTIFICATE OF REPORTER

I, JANIS L. JENNINGS, a Certified Shorthand Reporter of the State of California, do hereby certify:

That the foregoing proceedings were taken before me at the time and place herein set forth; that any witnesses in the foregoing proceedings, prior to testifying, were placed under oath; that a verbatim record of the proceedings was made by me using machine shorthand which was thereafter transcribed under my direction; further, that the foregoing is an accurate transcription thereof.

I further certify that I am neither financially interested in the action nor a relative or employee of any attorney of any of the parties.

IN WITNESS WHEREOF, I have this date subscribed my name.

Dated: January 17, 2011

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JANIS JENNINGS

CSR NO. 3942, CLR, CRP